

Preparation of the global elevation models for creating watersheds on the lowland territories

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Abstract

© Research India Publications. This article considers the methodology for digital elevation models (DEMs) preparation for automatic construction of the boundaries of the active drainage part of the river basins for lowland relief (using West Siberia as an example). The proposed method solves one of the main problems determining the accuracy of the water intake borders tracing. This problem is - the existing topography depressions affecting suspended sediment yield and surface runoff. The suggested method reflects one of the possible approaches for DEMs correction using additional information, obtained from topographic maps. Prepared by the authors' scheme, digital elevation models give a possibility for delineation of borders of actively drain part of watersheds for big river basins of Western Siberia.

Keywords

Geoinformation systems, Preprocessing dems, Watershed, West Siberia